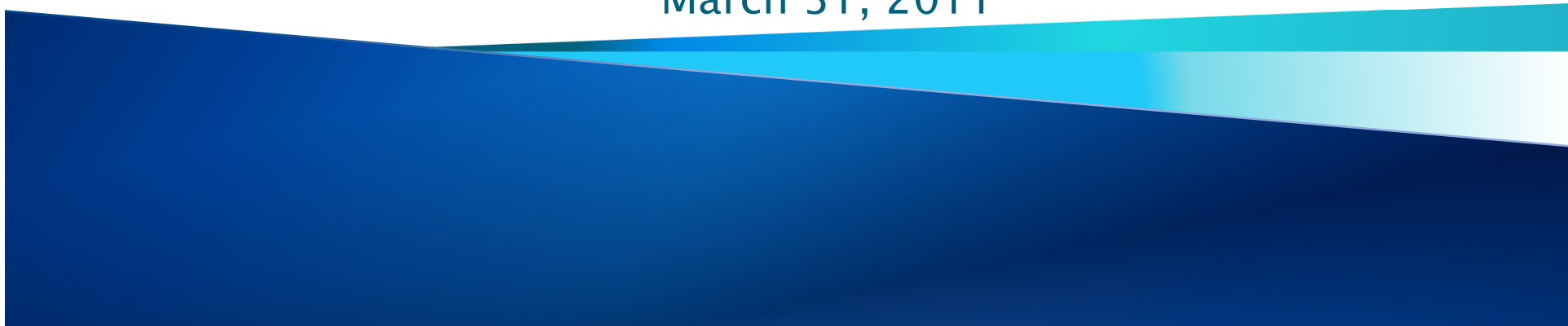




EMDQ Workshop
Standardizing, Consolidating and
Improving Air Quality Data in the Air Force
March 31, 2011



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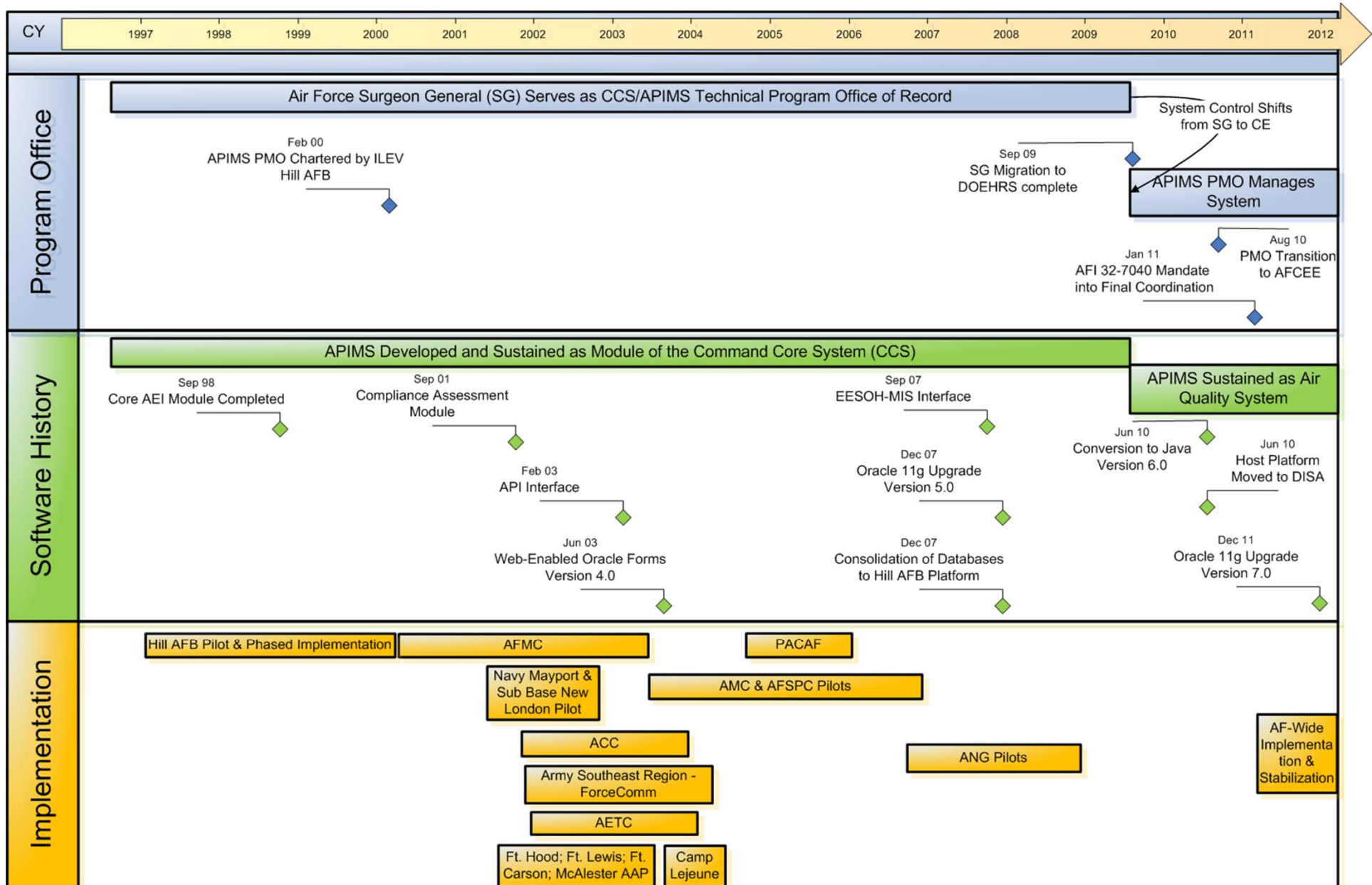
What is APIMS?

- ▶ Air Program Information Management System
 - Comprehensive Air Quality management database
- ▶ Owned by the Air Force
 - Available to all DoD installations
- ▶ Supports requirements of *AFI 32-7040 Air Quality Compliance and Resource Management*
- ▶ Used to drive use of standard calculation methods
 - AFCEE AEI guidance documents
 - AP-42 emission factors



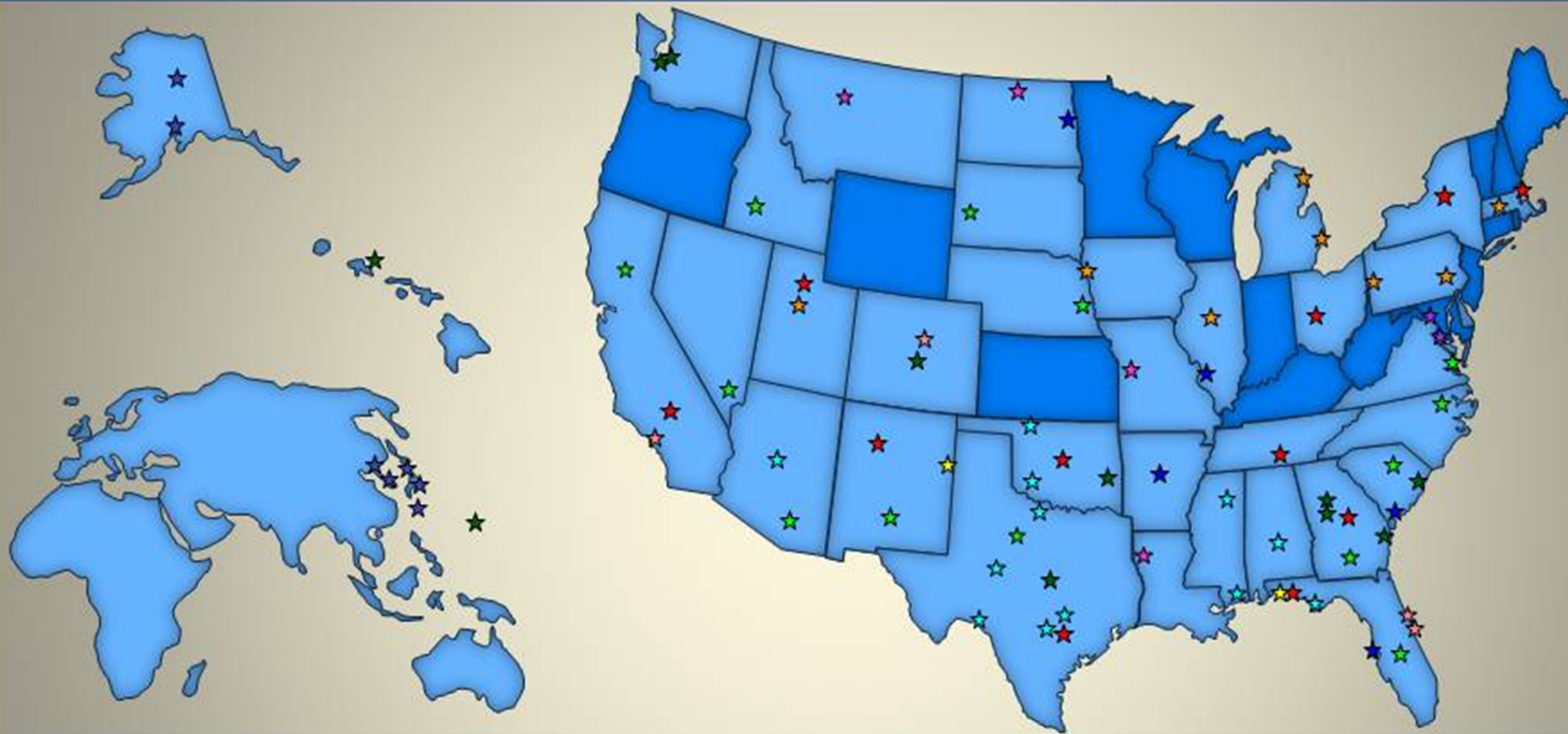


History of APIMS





User Community (DoD)



★ PACAF Eielson AFB J.B. Elmendorf-Richardson Kadena AFB Kunsan AFB Misawa AFB Osan AFB Yokota AFB	★ ACC Avon Park AFR Beale AFB Davis-Monthan AFB Dyess AFB Ellsworth AFB Holloman AFB Langley AFB Moody AFB Mountain Home AFB Nellis AFB Offutt AFB Seymour Johnson AFB Shaw AFB	★ AETC Altus AFB Columbus AFB Goodfellow AFB Keesler AFB Lackland AFB Laughlin AFB Luke AFB Maxwell AFB Randolph AFB Sheppard AFB Tyndall AFB Vance AFB	★ AFMC Arnold AFB Brooks City Base Edwards AFB Eglin AFB Hanscom AFB Hill AFB Kirtland AFB Robins AFB Rome Labs Tinker AFB Wright-Patterson AFB	★ ANG Alpena ANG Barnes ANG Peoria ANG Pittsburgh ANG Selfridge ANG Sioux City ANG Salt Lake City ANG Willow Grove ANG	★ AFSPC Buckley AFB Cape Canaveral Los Angeles AFB Patrick AFB	★ AMC J.B. Charleston Grand Forks AFB Little Rock AFB MacDill AFB Scott AFB	★ AFDW Andrews AFB Bolling AFB ★ AFSOC Cannon AFB Hurlburt Field	★ Non Air Force J.B. Lewis-McChord Ft Hood McAlester AAP Ft McPherson Ft Stewart Ft Carson Camp Lejeune Ft Gillem McChord Hickam Andersen
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Why APIMS?

- ▶ **Data Consolidation**
 - 200+ different AEI formats being condensed to a single electronic format
- ▶ **Data Standardization**
 - Facilitates data rollups & simplifies data calls
 - Drives uniformity in calculation methodologies
- ▶ **Improving Data Quality**
 - Single data standards repository
 - Fewer errors





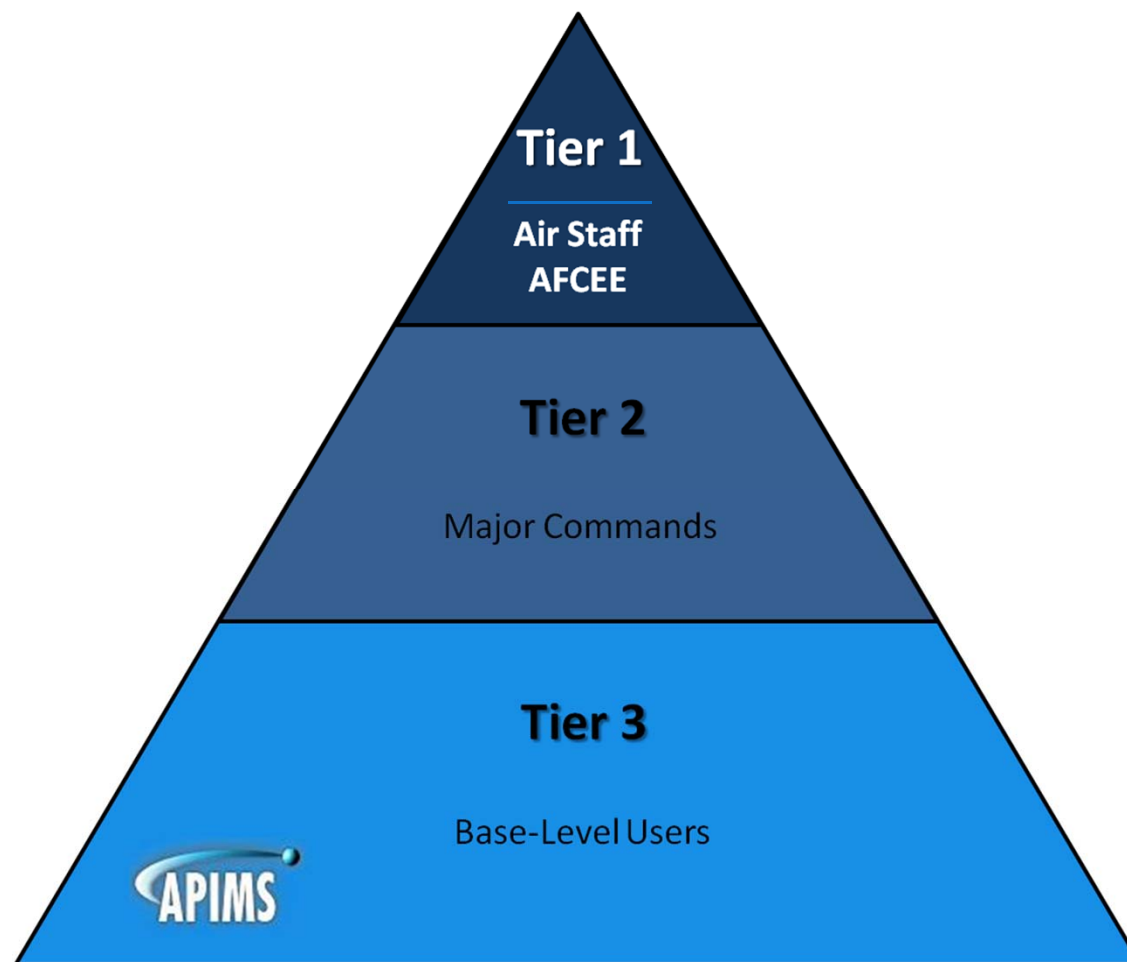
Why APIMS?

- ▶ Web-based, centrally hosted and easily accessible
- ▶ Only Air Quality compliance system that satisfies DoD/AF cyber security requirements
- ▶ Meets requirements of all tiers of the Air Force enterprise
- ▶ Funding constraints
 - Development/maintenance of redundant IT systems too expensive
 - simplifies generation of AElS & reduces cost





Multi-Tier Enterprise System Stakeholders





Supports Base Requirements

▶ Air Emissions Calculations

- Stationary Source Inventories
- Mobile source inventories
- Potential to Emit (PTE) calculations
- Compatibility with State reporting systems
- EPA Tanks 4.09D integrated & simplified

▶ Greenhouse Gas Management

- Executive Order 13514
- Mandatory Reporting Rule
 - Capability to export to EPA e-GGRT database planned

▶ Permit Management

- Upload copies of permits
- Documentation of permit conditions/requirements





Supports Base Requirements

- ▶ **Compliance Checking & Corrective Action**
 - Checklist & inspection result management
 - Corrective action tracking
- ▶ **Workbasket / Workflow**
 - Task scheduling & reminders
 - Compliance notifications
- ▶ **Ozone Depleting Chemical (ODC) Management**
 - Refrigerant compliance (40 CFR Part 82)
- ▶ **Record Repository**
 - Upload and store any image or compliance document
- ▶ **Quantitative Compliance**
 - Rolling totals (hourly/daily/monthly/yearly)
 - Material and emission limits vs. permit limits





Supports Base Requirements

- ▶ Interfaces with EESOH–MIS
 - Automates transfer of hazardous material and usage data (20,000 –300,000 records per year)
- ▶ Pre-loaded, Stewarded & Standardized Calculation Data Set (>30,000 records)
 - Source categories/algorithms/emission factors
 - Ability to create custom calculation methodologies
- ▶ Reduced data call burden
 - Data readily available to upper tiers of the enterprise



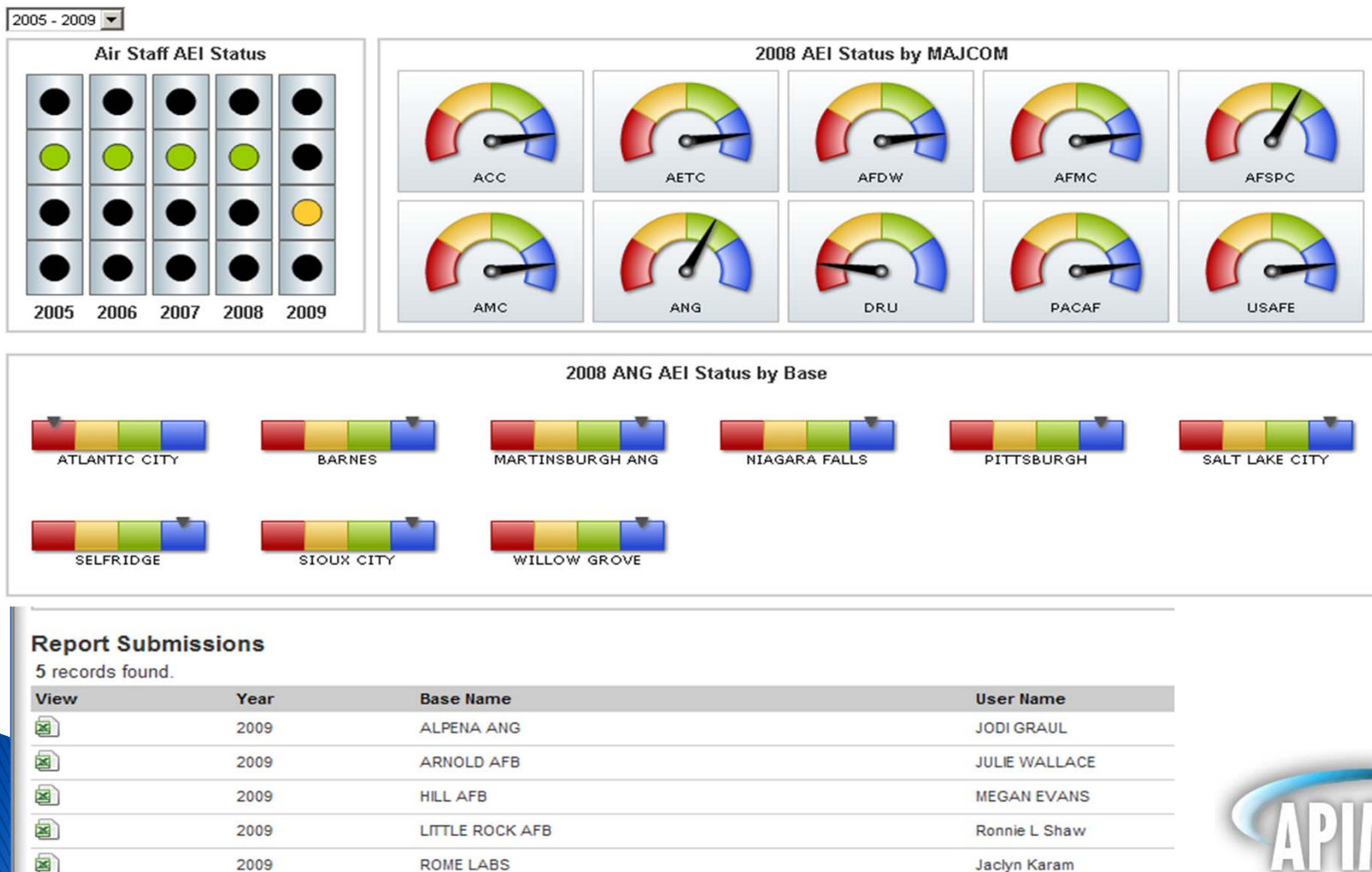
Enterprise Management Features

- ▶ Single Repository for Air Quality Data
- ▶ Attainment status visibility
- ▶ Instant access to permit information
- ▶ Use of emission calculation standards drives data uniformity and accuracy



Enterprise Management Features

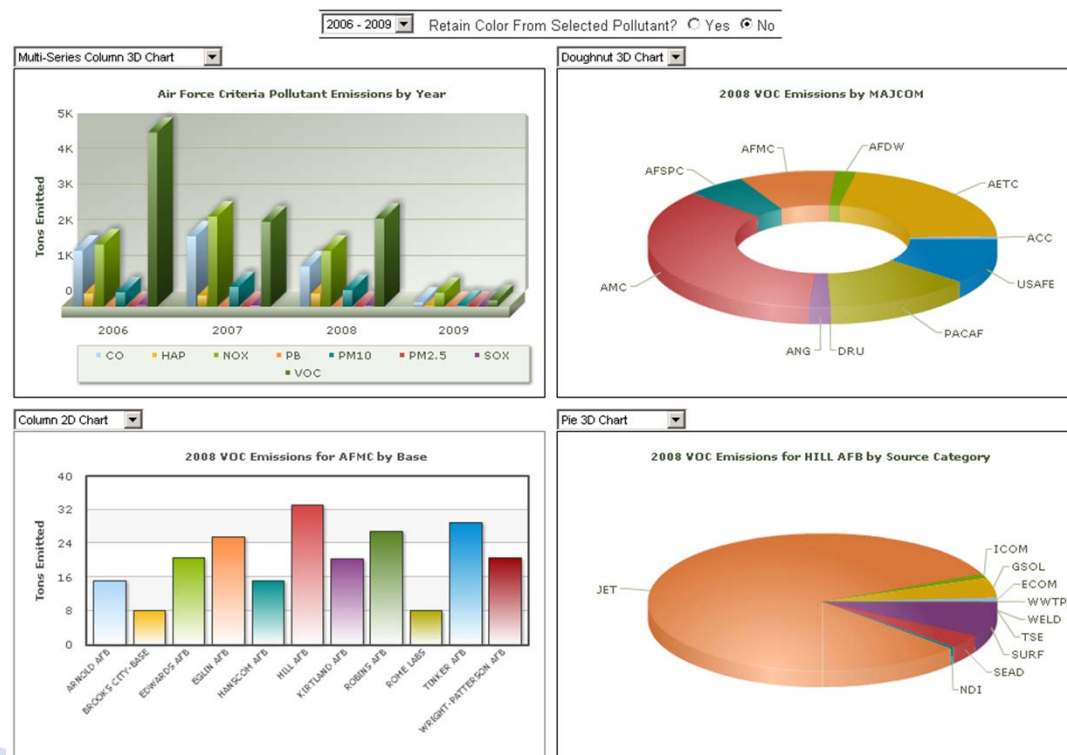
- Online submittal of AEI for enterprise review





Enterprise Management Features

- ▶ Real-time data visibility & trend analysis
- ▶ Drill-down enterprise data rollups





Lessons Learned

- ▶ Optional use of an enterprise solution = inconsistent use
 - Many users reverted back to historical nonstandard data management methods
- ▶ Adequate system sustainment budget needed to keep system viable
 - Keep up with current technologies or users grow restless
 - Make software changes to meet evolving requirements
- ▶ Provide users with bulk data loading capabilities
 - Application Program Interface (API)
- ▶ Reduce duplicate data entry – deploy to shop floor
 - Let shops enter their own emission source throughput data
 - Air Quality manager validates before use



User Support Services

- ▶ Help Desk
 - ▶ (800) 274-4406 or apims@ngc.com
 - ▶ Available 7:00 AM – 6:00 PM Central
- ▶ Ad-hoc reporting Support
 - ▶ Call help desk for custom reporting support or
 - ▶ Write your own reports using Oracle Discoverer
- ▶ Training
 - ▶ Beginner training 3-day hands-on course at PMO office
 - ▶ Training guides available for download in APIMS
 - ▶ Monthly refresher webinars
- ▶ Technical Advisory Group (TAG) participation
- ▶ Software upgrades
 - ▶ Including user-submitted change requests





Future of APIMS

- ▶ Use of APIMS to be mandated by AFI 32-7040
 - Revision in final coordination
- ▶ Complete Air Force-wide implementation
- ▶ CAA section 118 compliance
 - Self certification of emissions certificate for POVs
- ▶ Defense Environmental Programs Annual Report to Congress (DEP ARC) reporting
 - Proof of concept for Air Quality in work
- ▶ Improve data standards maintenance capability
 - Consolidate duplicate data sets to a single set





APIMS PMO POCs

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Questions???

